


# TEST REPORT

Report No.	CISRR250703018
Project No.	CISR250703018
FCC ID	2A9WC-BT005
Applicant	Zhongshan Bitop Intelligent Control Technology Co. Ltd.
Address	2nd Floor, Building E, No.3 Lefeng 6th Road, Maohui Industrial Zone,Henglan Town, Zhongshan City,Guangdong Province, China
Manufacturer	Zhongshan Bitop Intelligent Control Technology Co. Ltd.
Address	2nd Floor, Building E, No.3 Lefeng 6th Road, Maohui Industrial Zone,Henglan Town, Zhongshan City,Guangdong Province, China
Product Name	15-key remote control
Trademark	N/A
Model/Type reference	CIS-QS-PD04-F07-A2 V3
Listed Model(s)	N/A
Standard	47 CFR Part 15.249
Test date	July 5, 2025 to July 9, 2025
Issue date	July 11, 2025
Test result	<b>Complied</b>



Prepared by: Lucas Huang



Approved by: Genry Long

*The test results relate only to the tested samples.*

*The test report should not be reproduced except in full without the written approval of Shenzhen Bangce Testing Technology Co., Ltd.*

## Contents

<b>1. REPORT VERSION .....</b>	<b>3</b>
<b>2. SUMMARY OF TEST RESULT .....</b>	<b>4</b>
<b>3. SUMMARY .....</b>	<b>5</b>
3.1. Product Description .....	5
3.2. Radio Specification Description .....	5
3.3. Modification of EUT .....	6
3.4. Testing Site .....	6
3.5. Field Strength Calculation .....	6
3.6. DISTURBANCE Calculation .....	6
<b>4. TEST CONFIGURATION .....</b>	<b>7</b>
4.1. Test frequency list .....	7
4.2. Test mode .....	7
4.3. Support unit used in test configuration and system .....	7
4.4. Test sample information .....	7
4.5. Testing environmental condition .....	7
4.6. Statement of the measurement uncertainty .....	7
4.7. Equipment Used during the Test .....	8
<b>5. TEST CONDITIONS AND RESULTS .....</b>	<b>10</b>
5.1. Antenna Requirement .....	10
5.2. 20 dB Bandwidth .....	11
5.3. Radiated Band edge Emission .....	13
5.4. Radiated Spurious Emission .....	19
<b>6. TEST SETUP PHOTOS .....</b>	<b>29</b>
<b>7. EXTERNAL AND INTERNAL PHOTOS .....</b>	<b>30</b>
7.1 External photos .....	30
7.2 Internal photos .....	32

**1. REPORT VERSION**

Version No.	Issue date	Description
00	July 11, 2025	Original

## 2. SUMMARY OF TEST RESULT

Report clause	Test Item	Standard Requirement	Result
5.1	Antenna Requirement	15.203	PASS
5.2	20 dB Bandwidth	15.215 (c)	PASS
5.3	Radiated Band Edge Emission	15.205/15.209/15.249(d)	PASS
5.4	Radiated Spurious Emission	15.249(a)(c)(e)/15.205/15.209	PASS

Note:

- The measurement uncertainty is not included in the test result.

### 3. SUMMARY

#### 3.1. Product Description

Main unit information:	
Product Name:	15-key remote control
Trade Mark:	N/A
Model No.:	CIS-QS-PD04-F07-A2 V3
Listed Model(s):	N/A
Model difference:	N/A
Power supply:	Input: DC 3.3V
Hardware version:	11041A
Software version:	N/A
Accessory unit (AU) information:	
Battery:	N/A

#### 3.2. Radio Specification Description

Technology:	2.4G
Modulation:	GFSK
Operation frequency:	2402MHz~2480MHz
Channel number:	3
Antenna type:	PCB antenna
Antenna gain:	0dBi

Channel list:

CH1	2402
CH2	2426
CH3	2480

### 3.3. Modification of EUT

No modifications are made to the EUT during all test items.

### 3.4. Testing Site

Laboratory Name	Shenzhen Bangce Testing Technology Co., Ltd.
Laboratory Location	101, building 10, Yunli Intelligent Park, Shutianpu community, Matian Street, Guangming District, Shenzhen, Guangdong, China
FCC registration number	736346

### 3.5. Field Strength Calculation

The field strength is calculated by adding the Antenna Factor and Cable Factor and subtracting the Amplifier Gain and Duty Cycle Correction Factor (if any) from the measured reading. The basic equation with a sample calculation is as follows:

$$FS \text{ (dBuV/m)} = RA \text{ (dBuV)} + AF \text{ (dB/m)} + CL \text{ (dB)} - AG \text{ (dB)}$$

Where FS = Field Strength	CL = Cable Attenuation Factor (Cable Loss)
RA = Reading Amplitude	AG = Amplifier Gain
AF = Antenna Factor	

### 3.6. DISTURBANCE Calculation

The AC mains conducted disturbance is calculated by adding the 10dB Pulse Limiter and Cable Factor and Duty Cycle Correction Factor (if any) from the measured reading. The basic equation with a sample calculation is as follows:

$$CD \text{ (dBuV)} = RA \text{ (dBuV)} + PL \text{ (dB)} + CL \text{ (dB)}$$

Where CD = Conducted Disturbance	CL = Cable Attenuation Factor (Cable Loss)
RA = Reading Amplitude	PL = 10 dB Pulse Limiter Factor

## 4. TEST CONFIGURATION

All measurements contained in this report were conducted with ANSI C63.10-2013, American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices.

### 4.1. Test frequency list

Channel	Frequency (MHz)
CH-L	2402
CH-M	2426
CH-H	2480

### 4.2. Test mode

No	Test mode	Description
TM1	TX mode	Keep the EUT in continuously transmitting mode with GFSK modulation at lowest, middle and highest channel.
TM2	Link mode	Keep the EUT in Bluetooth linking mode with AE.

### 4.3. Support unit used in test configuration and system

The EUT has been associated with peripherals and configuration operated in a manner tended to maximize its emission characteristics in a typical application.

The following peripheral devices and interface cables were connected during the measurement:

Item	Equipment name	Trade Name	Model No.
1	--	--	--

### 4.4. Test sample information

Type	sample no.
Engineer sample	CISR250519101--S01
Normal sample	CISR250519101--S01

### 4.5. Testing environmental condition

Type	Requirement	Actual
Temperature:	15~35°C	25°C
Relative Humidity:	25~75%	50%
Air Pressure:	860~1060mbar	1000mbar

### 4.6. Statement of the measurement uncertainty

No.	Test Items	Measurement Uncertainty
1	AC Conducted Emission	1.63dB
2	20dB Bandwidth	0.002%

3	Radiated Band Edge Emission	3.76dB for 30MHz-1GHz 3.80dB for above 1GHz
4	Radiated Spurious Emission	3.76dB for 30MHz-1GHz 3.80dB for above 1GHz

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=1.96.

#### 4.7. Equipment Used during the Test

AC Conducted Emission						
Item	Equipment name	Manufacturer	Model	Serial No.	Calibration date	Due date
1	EMI Test Receiver	Rohde&schwarz	ESCI7	100853	2025-01-08	2026-01-07
2	Artificial power network	Schwarzbeck	NSLK8127	8127-01096	2025-01-08	2026-01-07
3	8-wire Impedance Stabilization Network	Schwarzbeck	NTFM 8158	8158-00337	2025-01-08	2026-01-07
4	Artificial power network	Schwarzbeck	ENV216	/	2025-01-08	2026-01-07

20 dB Bandwidth						
Item	Equipment name	Manufacturer	Model	Serial No.	Calibration date	Due date
1	MXG RF Signal Generator	Agilent	N5181A	MY50145362	2025-01-08	2026-01-07
2	Spectrum analyzer	R&S	FSV-40N	102130	2025-01-08	2026-01-07
3	Vector Signal Generator	Agilent	N5182A	MY50142364	2025-01-08	2026-01-07
4	Power Meter	WCS	WCS-PM	WCSPM230405A	2025-01-08	2026-01-07

Radiated Band Edge Emission Radiated Spurious Emission						
Item	Equipment name	Manufacturer	Model	Serial No.	Calibration date	Due date
1	EMI Test Receiver	Rohde&schwarz	ESCI7	100853	2025-01-08	2026-01-07
2	Amplifier	Tonscend	TAP9K3G40	AP23A8060270	2025-01-08	2026-01-07
3	Prime amplifier	Tonscend	TAP01018050	AP23A8060280	2025-01-08	2026-01-07
4	9*6*6 anechoic chamber	SKET	9.3*6.3*6	N/A	2024-09-02	2027-09-01
5	Spectrum analyzer	Agilent	N9020A	MY50530263	2025-01-08	2026-01-07
6	Spectrum analyzer	R&S	FSV-40N	102130	2025-01-08	2026-01-07
7	Bilog Antenna	Schwarzbeck	VULB 9163	1463	2023-01-09	2026-01-08
8	Horn Antenna	SCHWARZBECK	BBHA 9120 D	2487	2023-01-09	2026-01-08



9	Active Loop Antenna	SCHWARZBECK	FMZB 1519B	/	2023-01-09	2026-01-08
10	RF Cable	Tonscend	Cable 1	/	2025-01-08	2026-01-07
11	RF Cable	Tonscend	Cable 2	/	2025-01-08	2026-01-07
12	RF Cable	SKET	Cable 3	/	2025-01-08	2026-01-07
13	L.I.S.N.#1	Schwarzbeck	NSLK8127	/	2025-01-08	2026-01-07
14	L.I.S.N.#2	ROHDE&SCHWARZ	ENV216	/	2025-01-08	2026-01-07
15	Horn Antenna	SCHWARZBECK	BBHA9170	1130	2023-01-09	2026-01-08
16	Preamplifier	Tonscend	TAP18040048	AP21C806126	2025-01-08	2026-01-07
17	Variable-frequency power source	Pinhong	PH1110	/	2025-01-08	2026-01-07
18	6dB Attenuator	SKET	DC-6G	/	2025-01-08	2026-01-07
19	Antenna tower	SKT	Bk-4AT-BS	AT2021040101-V1	2025-01-08	2026-01-07

## 5. TEST CONDITIONS AND RESULTS

### 5.1. Antenna Requirement

#### Standard Applicable

#### **FCC CFR Title 47 Part 15 Subpart C Section 15.203:**

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

#### Description

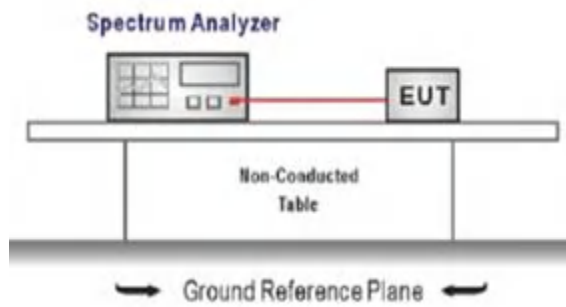
The EUT antenna is PCB antenna (0dBi), the directional gain of the antenna less than 6dBi. It comply with the standard requirement. In case of replacement of broken antenna the same antenna type must be used. Antenna structure please refer to the EUT internal photographs antenna photo.

Remark: The antenna gain is provided by the customer, if the data provided by the customer is not accurate, Shenzhen Bangce Testing Technology Co., Ltd. does not assume any responsibility.

## 5.2. 20 dB Bandwidth

Limit:

Test configuration:



Test procedure:

1. The transmitter output was connected to the spectrum analyzer through an attenuator, the path loss was compensated to the results for each measurement.
2. Set to the maximum power setting and enable the EUT transmit continuously
3. Use the following spectrum analyzer settings:  
Span = approximately 2 to 3 times the 20 dB bandwidth, centered on a hopping channel  
RBW  $\geq$  1% of the 20 dB bandwidth, VBW  $\geq$  RBW  
Sweep = auto, Detector function = peak, Trace = max hold
4. Measure and record the results in the test report.

Operating Environment:

Temperature:	22.2 °C	Humidity:	56.3 %	Atmospheric Pressure:	103 kPa
Pre test mode:	TM1				
Final test mode:	TM1				

Test Setup Diagram

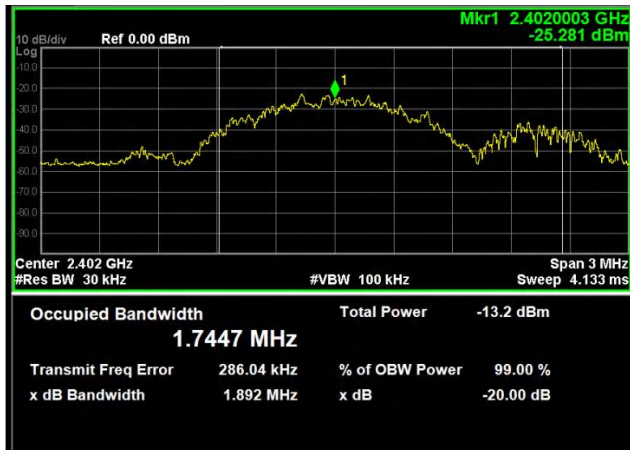

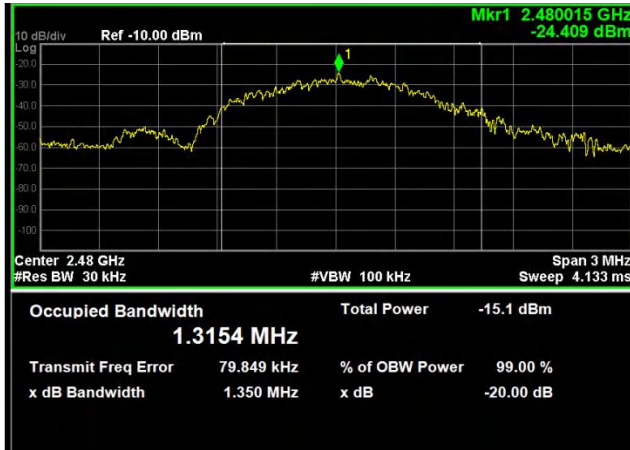


Test Result

Pass

## Test Data

Test Result of 20dB Bandwidth Measurement		
Test Frequency(MHz)	20dB Bandwidth(MHz)	Limit(MHz)
2402	1.892	Non-Specified
2426	1.805	Non-Specified
2480	1.350	Non-Specified

20dB Bandwidth	
	
2402MHz	2426MHz
	
2480MHz	

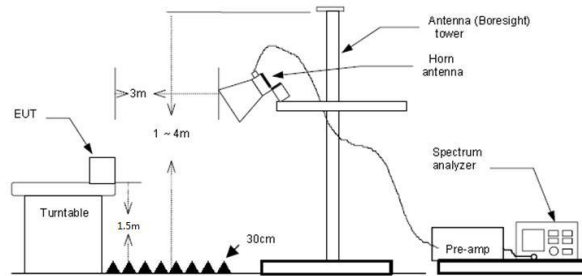
### 5.3. Radiated Band edge Emission

#### Limit:

#### **FCC CFR Title 47 Part 15 Subpart C Section 15.249 (d):**

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in § 15.209, whichever is the lesser attenuation.

#### Test configuration:



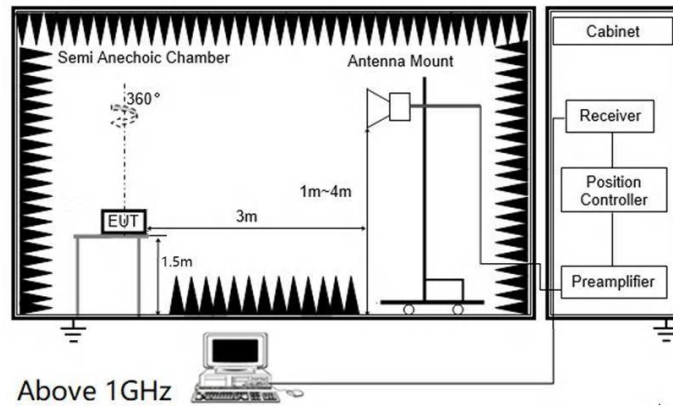
#### Test procedure:

1. The EUT was setup and tested according to ANSI C63.10 .
2. The EUT is placed on a turn table which is 1.5 meter above ground. The turn table is rotated 360 degrees to determine the position of the maximum emission level.
3. The EUT was positioned such that the distance from antenna to the EUT was 3 meters.
4. The antenna is scanned from 1 meter to 4 meters to find out the maximum emission level. This is repeated for both horizontal and vertical polarization of the antenna. In order to find the maximum emission, all of the interface cables were manipulated according to ANSI C63.10 on radiated measurement.
5. Use the following spectrum analyzer settings:
  - a) Span shall be wide enough to fully capture the emission being measured
  - b) Set RBW=100kHz for <1GHz, VBW=3\*RBW, Sweep time=auto, Detector=peak, Trace=max hold
  - c) Set RBW=1MHz, VBW=3MHz for >1GHz, Sweep time=auto, Detector=peak, Trace=max hold for Peak measurement
  - d) Set RBW=1MHz, VBW=3MHz for >1GHz, Sweep time=auto, Detector=Average, Trace=RMS for Average measurement

#### Operating Environment:

Temperature:	22.2 °C	Humidity:	56.5 %	Atmospheric Pressure:	103 kPa
Pre test mode:	TM1, TM2				
Final test mode:	TM1, TM2				

#### Test Setup Diagram



### Test Result

Pass

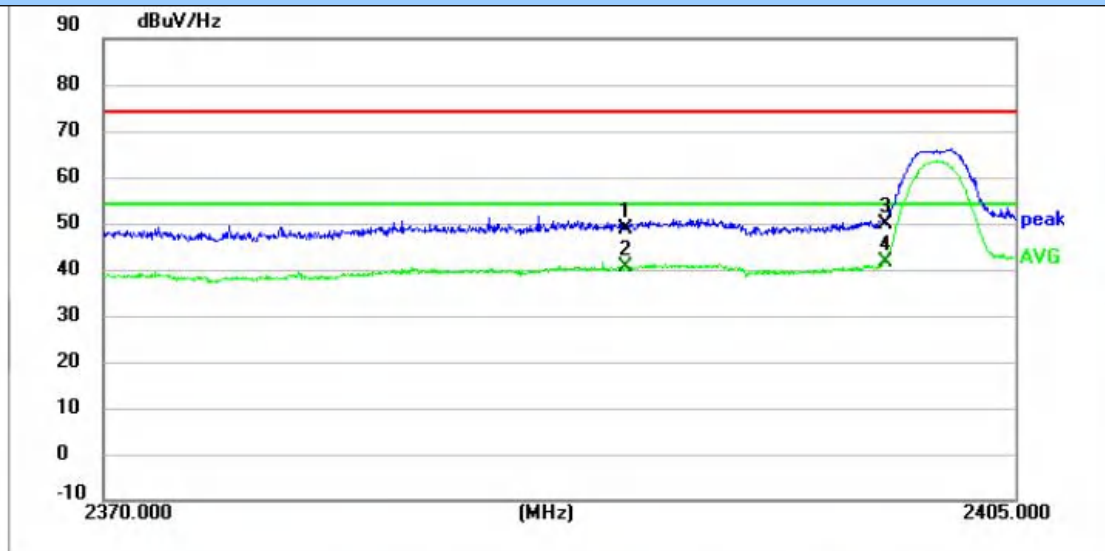
## Test Data

Note:

- 1) Level= Reading + Factor; Factor =Antenna Factor+ Cable Loss- Preamp Factor
- 2) Margin = Limit - Level

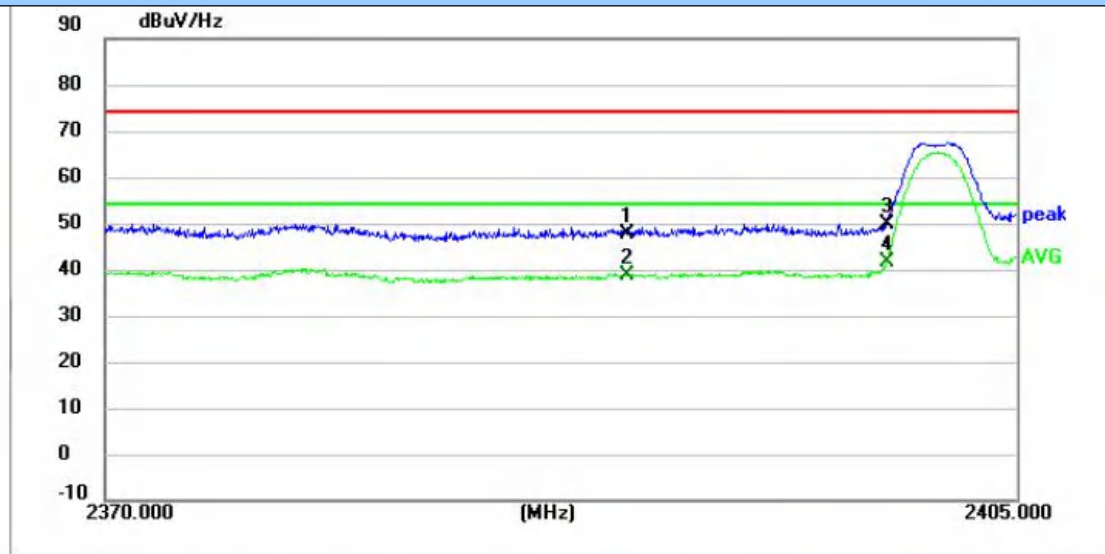
Have pre-scan all test mode, found TM1 mode which it was worst case, so only show the worst case's data on this report.

Mode1 / Polarization: Horizontal / CH: L



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/Hz)	Limit (dBuV/Hz)	Margin (dB)	Detector
1	2390.0000	46.58	2.34	48.92	74.00	-25.08	peak
2	2390.0000	38.14	2.34	40.48	54.00	-13.52	AVG
3	2400.0000	47.60	2.38	49.98	74.00	-24.02	peak
4 *	2400.0000	39.15	2.38	41.53	54.00	-12.47	AVG

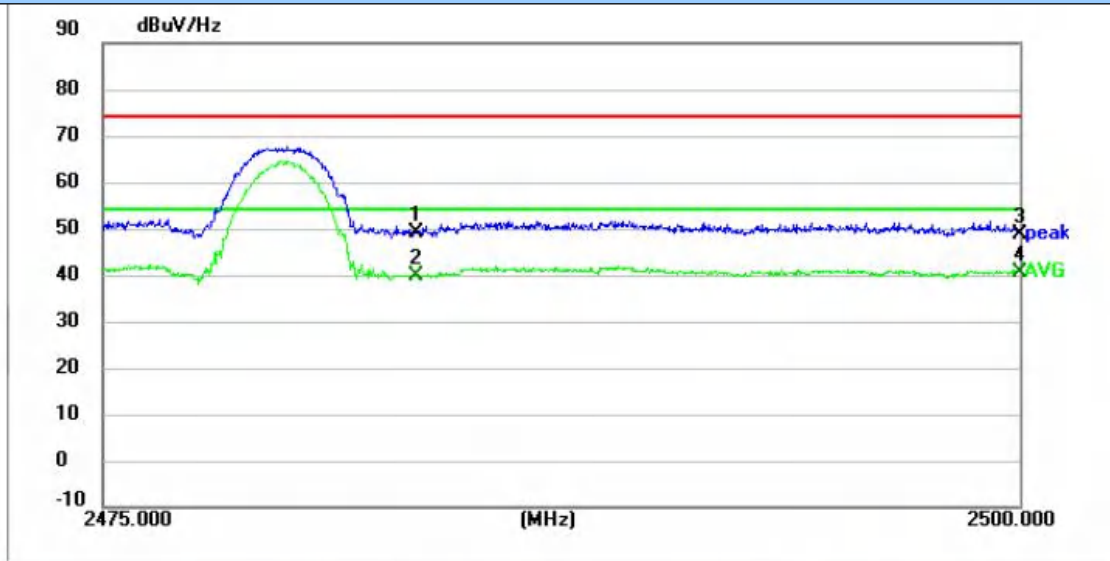
Mode1 / Polarization: Vertical / CH: L



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/Hz)	Limit (dBuV/Hz)	Margin (dB)	Detector
1	2390.0000	45.26	2.34	47.60	74.00	-26.40	peak
2	2390.0000	36.54	2.34	38.88	54.00	-15.12	AVG
3	2400.0000	47.52	2.38	49.90	74.00	-24.10	peak
4 *	2400.0000	39.17	2.38	41.55	54.00	-12.45	AVG

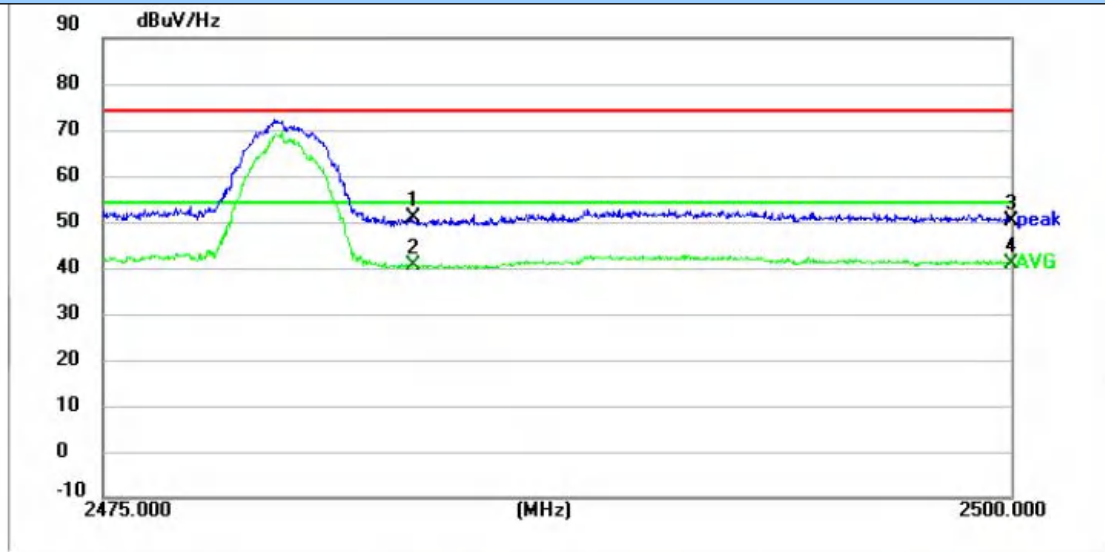


Mode1 / Polarization: Horizontal / CH: H



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/Hz)	Limit (dBuV/Hz)	Margin (dB)	Detector
1	2483.5000	46.37	2.66	49.03	74.00	-24.97	peak
2	2483.5000	37.04	2.66	39.70	54.00	-14.30	AVG
3	2500.0000	46.10	2.80	48.90	74.00	-25.10	peak
4 *	2500.0000	37.59	2.80	40.39	54.00	-13.61	AVG

Mode1 / Polarization: Vertical / CH: H



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/Hz)	Limit (dBuV/Hz)	Margin (dB)	Detector
1	2483.5000	48.37	2.66	51.03	74.00	-22.97	peak
2	2483.5000	37.71	2.66	40.37	54.00	-13.63	AVG
3	2500.0000	47.34	2.80	50.14	74.00	-23.86	peak
4 *	2500.0000	37.95	2.80	40.75	54.00	-13.25	AVG

## 5.4. Radiated Spurious Emission

### Limit:

#### FCC CFR Title 47 Part 15 Subpart C Section 15.209

Frequency	Limit (dBuV/m)	Value
0.009 MHz ~0.49 MHz	2400/F(kHz) @300m	Quasi-peak
0.49 MHz ~ 1.705 MHz	24000/F(kHz) @30m	Quasi-peak
1.705 MHz ~30 MHz	30 @30m	Quasi-peak

Limit dBuV/m @3m = Limit dBuV/m @300m + 40\*log(300/3)

Limit dBuV/m @3m = Limit dBuV/m @30m +40\*log(30/3)

#### FCC CFR Title 47 Part 15 Subpart C Section 15.249

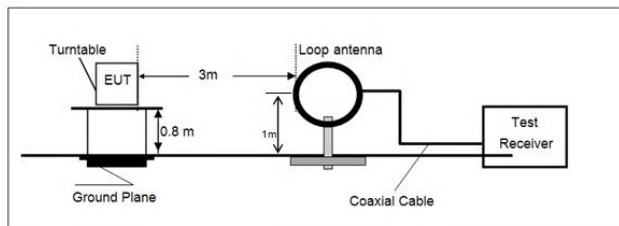
As shown in § 15.35(b), for frequencies above 1000 MHz, the field strength limits in paragraphs (a) and (b) of this section are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation. For point-to-point operation under paragraph (b) of this section, the peak field strength shall not exceed 2500 millivolts/meter at 3 meters along the Antenna azimuth.

Fundamental frequency	Field strength of fundamental (millivolts/meter)	Field strength of harmonics (microvolts/meter)
902-928 MHz	50	500
2400-2483.5 MHz	50	500
5725-5875 MHz	50	500
24.0-24.25 GHz	250	2500

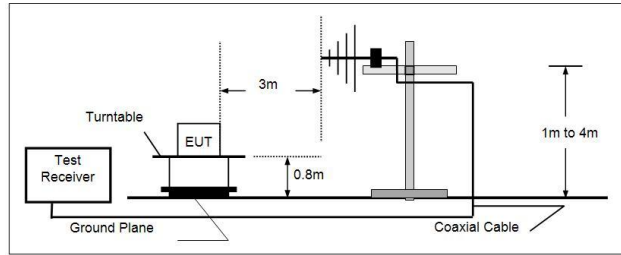
Frequency	Limit (dBuV/m @3m)	Value
30MHz~88MHz	40.00	Quasi-peak
88MHz~216MHz	43.50	Quasi-peak
216MHz~960MHz	46.00	Quasi-peak
960MHz~1GHz	54.00	Quasi-peak
Above 1GHz(Field strength of fundamental)	94.00	Average
	114.00	Peak
Above 1GHz(Field strength of harmonics)	54.00	Average
	74.00	Peak

### Test configuration:

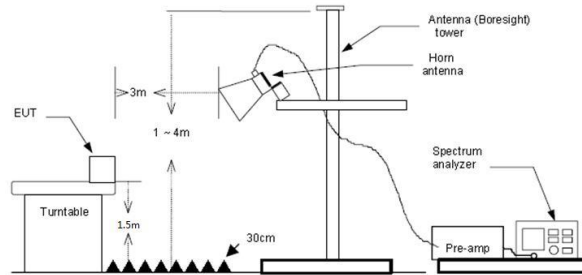
9kHz~30MHz



30 MHz ~ 1 GHz



Above 1 GHz



Test procedure:

1. The EUT was setup and tested according to ANSI C63.10.
2. The EUT is placed on a turn table which is 0.8 meter above ground for below 1 GHz, and 1.5 m for above 1 GHz. The turn table is rotated 360 degrees to determine the position of the maximum emission level.
3. The EUT was set 3 meters from the receiving antenna, which was mounted on the top of a variable height antenna tower.
4. For each suspected emission, the EUT was arranged to its worst case and then tune the Antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level to comply with the guidelines.
5. Set to the maximum power setting and enable the EUT transmit continuously.
6. Use the following spectrum analyzer settings
  - a) Span shall wide enough to fully capture the emission being measured;
  - b) Below 1 GHz:  
RBW=120 kHz, VBW=300 kHz, Sweep=auto, Detector function=peak, Trace=max hold;  
If the emission level of the EUT measured by the peak detector is 3 dB lower than the applicable limit, the peak emission level will be reported. Otherwise, the emission measurement will be repeated using the quasi-peak detector and reported.
  - c) Set RBW=1MHz, VBW=3MHz for >1GHz, Sweep time=auto, Detector=peak, Trace=max hold for Peak measurement
  - d) Set RBW=1MHz, VBW=3MHz for >1GHz, Sweep time=auto, Detector=Average, Trace=RMS for Average measurement

Operating Environment:

Temperature :	22.2 °C	Humidity:	56.5 %	Atmospheric Pressure:	103 kPa
Pre test mode:	TM1, TM2				
Final test mode:	TM1, TM2				

Test Result  
Pass

## Test Data

Note:

- 1) Level= Reading + Factor/Transd; Factor/Transd =Antenna Factor+ Cable Loss- Preamp Factor
- 2) Margin = Limit – Level
- 3) Average measurement was not performed if peak level is lower than average limit(54 dBuV/m) for above 1GHz.

### For 9 kHz ~ 30 MHz

The EUT was pre-scanned this frequency band, found the radiated level 20dB lower than the limit, so don't show data on this report.

### For 30 MHz ~ 1000 MHz

Have pre-scan all test mode, found TM1 mode CH00 which it was worst case, so only show the worst case's data on this report.

Mode1 / Polarization: Horizontal / CH: L



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	41.4215	46.71	-30.36	16.35	40.00	-23.65	QP
2	71.5805	47.57	-33.32	14.25	40.00	-25.75	QP
3	139.3610	50.60	-34.14	16.46	43.50	-27.04	QP
4 *	229.2930	54.48	-29.06	25.42	46.00	-20.58	QP
5	301.4223	51.05	-27.05	24.00	46.00	-22.00	QP
6	793.3960	39.39	-16.61	22.78	46.00	-23.22	QP

Mode1 / Polarization: Vertical / CH: L



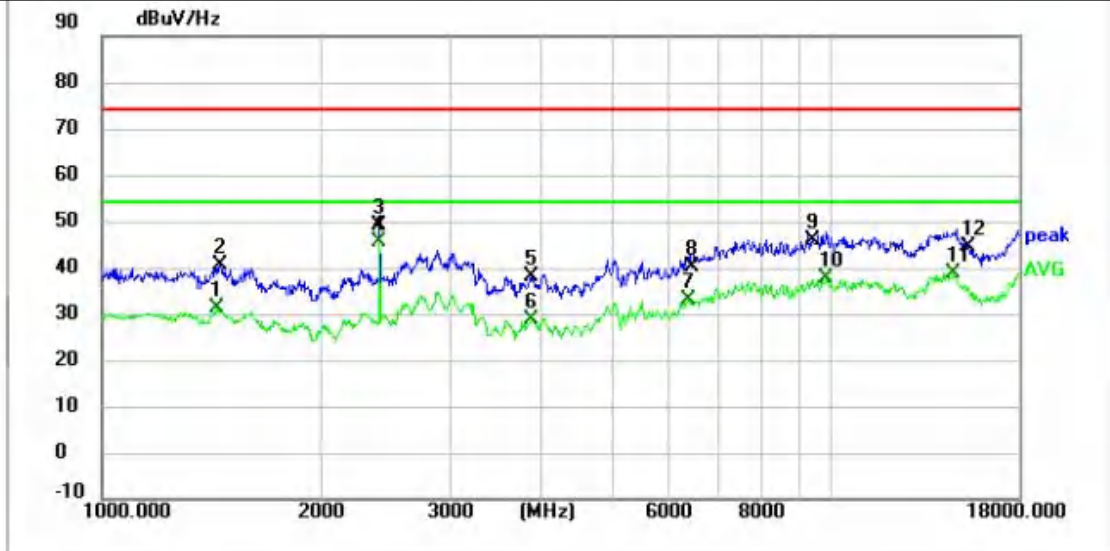
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	41.1320	53.91	-30.44	23.47	40.00	-16.53	QP
2 *	50.7635	53.18	-29.29	23.89	40.00	-16.11	QP
3	154.8204	55.09	-33.22	21.87	43.50	-21.63	QP
4	301.4223	47.34	-27.05	20.29	46.00	-25.71	QP
5	359.1860	48.15	-25.56	22.59	46.00	-23.41	QP
6	612.0641	40.74	-18.95	21.79	46.00	-24.21	QP



### For 1 GHz ~ 25 GHz

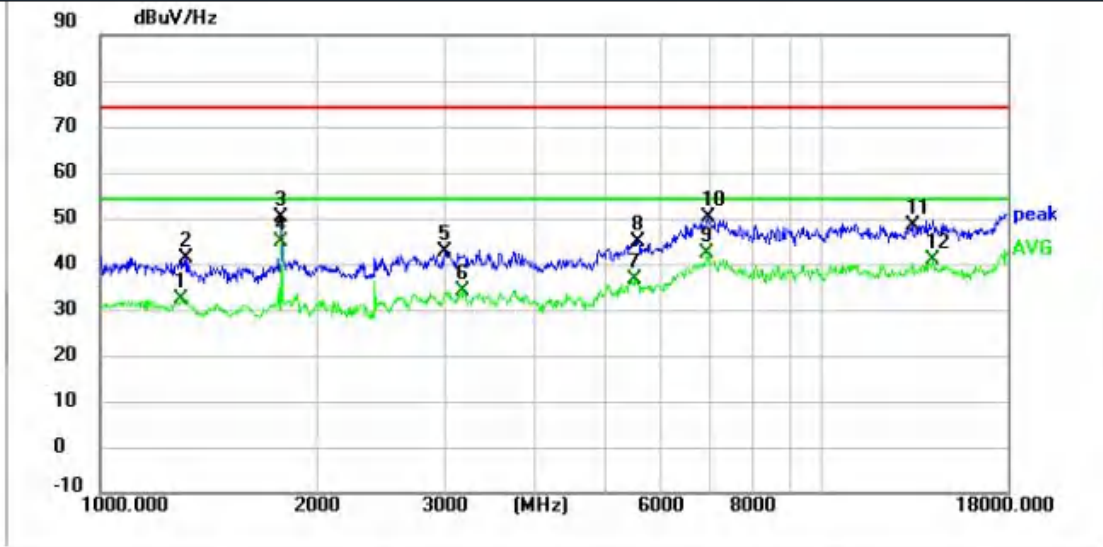
Have pre-scan all test mode, found TM1 mode which it was worst case, so only show the worst case's data on this report.

Mode1 / Polarization: Horizontal / CH: L



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/Hz)	Limit (dBuV/Hz)	Margin (dB)	Detector
1	1442.0000	32.58	-1.37	31.21	54.00	-22.79	AVG
2	1455.6000	41.85	-1.32	40.53	74.00	-33.47	peak
3	2404.2000	46.77	2.38	49.15	74.00	-24.85	peak
4 *	2404.2000	43.10	2.38	45.48	54.00	-8.52	AVG
5	3878.1000	30.87	7.05	37.92	74.00	-36.08	peak
6	3878.1000	21.83	7.05	28.88	54.00	-25.12	AVG
7	6355.0000	15.34	17.65	32.99	54.00	-21.01	AVG
8	6431.5000	22.05	18.15	40.20	74.00	-33.80	peak
9	9423.5000	21.80	24.23	46.03	74.00	-27.97	peak
10	9836.6000	12.52	25.18	37.70	54.00	-16.30	AVG
11	14662.9000	49.42	-10.63	38.79	54.00	-15.21	AVG
12	15356.5000	55.86	-11.57	44.29	74.00	-29.71	peak

Mode1 / Polarization: Vertical / CH: L



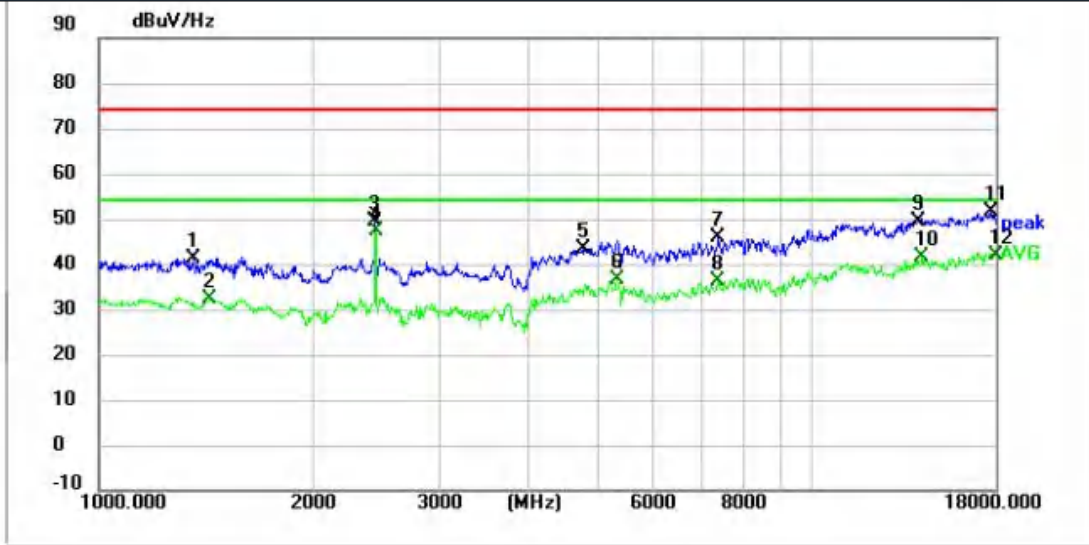
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/Hz)	Limit (dBuV/Hz)	Margin (dB)	Detector
1	1299.2000	34.00	-1.61	32.39	54.00	-21.61	AVG
2	1316.2000	42.85	-1.62	41.23	74.00	-32.77	peak
3	1785.4000	50.39	-0.27	50.12	74.00	-23.88	peak
4 *	1785.4000	45.05	-0.27	44.78	54.00	-9.22	AVG
5	3002.6000	36.57	6.10	42.67	74.00	-31.33	peak
6	3169.2000	27.76	6.45	34.21	54.00	-19.79	AVG
7	5516.9000	21.88	14.86	36.74	54.00	-17.26	AVG
8	5552.6000	29.99	14.86	44.85	74.00	-29.15	peak
9	6934.7000	21.29	20.86	42.15	54.00	-11.85	AVG
10	6961.9000	29.24	21.03	50.27	74.00	-23.73	peak
11	13345.4000	60.13	-11.58	48.55	74.00	-25.45	peak
12	14234.5000	51.45	-10.55	40.90	54.00	-13.10	AVG

Test channel:2402MHz

Freq. (MHz)	Reading (dBuv)	Ant. Factor (dB/m)	Cable Factor (dB)	Pre-amplifier (dB)	Correction Factor (dB/m)	Level (dBuv)	Limit (dBuV/m)	Margin (dB)	Remark	Polarity
2402.00	90.08	29.18	4.02	38.35	-5.15	84.93	114	29.07	Peak	Horizontal
2402.00	81.35	29.18	4.02	38.35	-5.15	76.20	94	17.80	Average	Horizontal
2402.00	82.52	29.18	4.02	38.35	-5.15	77.37	114	36.63	Peak	Vertical
2402.00	67.62	29.18	4.02	38.35	-5.15	62.47	94	31.53	Average	Vertical

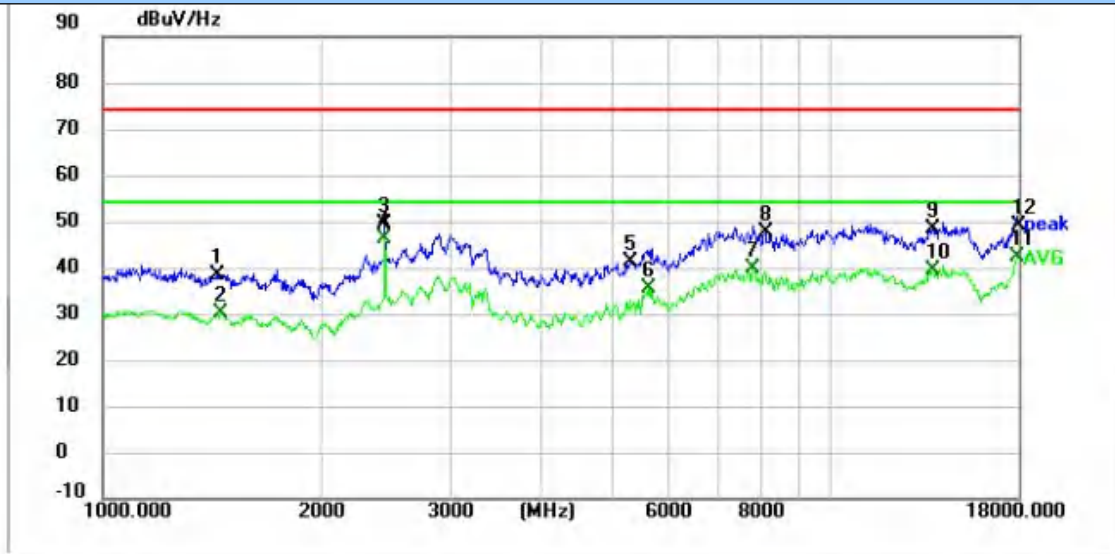


Mode1 / Polarization: Horizontal / CH: M



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/Hz)	Limit (dBuV/Hz)	Margin (dB)	Detector
1	1358.7000	42.99	-1.65	41.34	74.00	-32.66	peak
2	1431.8000	33.73	-1.44	32.29	54.00	-21.71	AVG
3	2441.6000	47.24	2.39	49.63	74.00	-24.37	peak
4 *	2443.3000	45.08	2.39	47.47	54.00	-6.53	AVG
5	4780.8000	32.94	10.34	43.28	74.00	-30.72	peak
6	5338.4000	23.03	13.61	36.64	54.00	-17.36	AVG
7	7388.6000	23.83	22.12	45.95	74.00	-28.05	peak
8	7388.6000	14.16	22.12	36.28	54.00	-17.72	AVG
9	14079.8000	60.29	-10.71	49.58	74.00	-24.42	peak
10	14212.4000	52.01	-10.53	41.48	54.00	-12.52	AVG
11	17779.0000	61.62	-10.13	51.49	74.00	-22.51	peak
12	18000.0000	50.93	-8.90	42.03	54.00	-11.97	AVG

Mode1 / Polarization: Vertical / CH: M

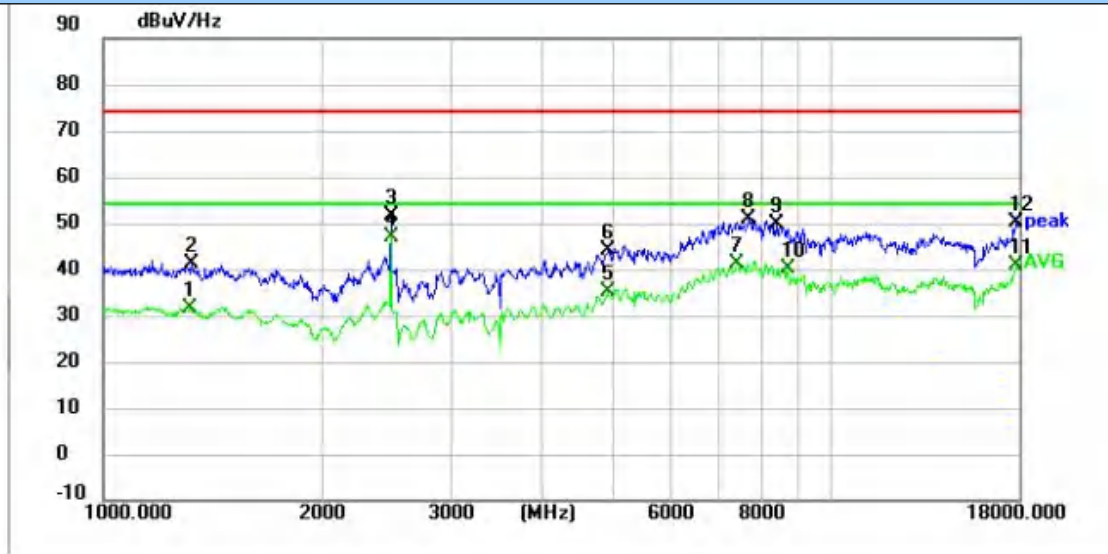


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/Hz)	Limit (dBuV/Hz)	Margin (dB)	Detector
1	1438.6000	39.95	-1.41	38.54	74.00	-35.46	peak
2	1453.9000	31.36	-1.32	30.04	54.00	-23.96	AVG
3	2441.6000	47.12	2.39	49.51	74.00	-24.49	peak
4 *	2441.6000	43.69	2.39	46.08	54.00	-7.92	AVG
5	5289.1000	27.58	13.66	41.24	74.00	-32.76	peak
6	5613.8000	20.77	14.77	35.54	54.00	-18.46	AVG
7	7806.8000	17.62	22.10	39.72	54.00	-14.28	AVG
8	8112.8000	24.89	22.71	47.60	74.00	-26.40	peak
9	13775.5000	59.44	-11.18	48.26	74.00	-25.74	peak
10	13775.5000	50.69	-11.18	39.51	54.00	-14.49	AVG
11	17989.8000	51.30	-8.95	42.35	54.00	-11.65	AVG
12	18000.0000	57.86	-8.90	48.96	74.00	-25.04	peak

Test channel:2426MHz

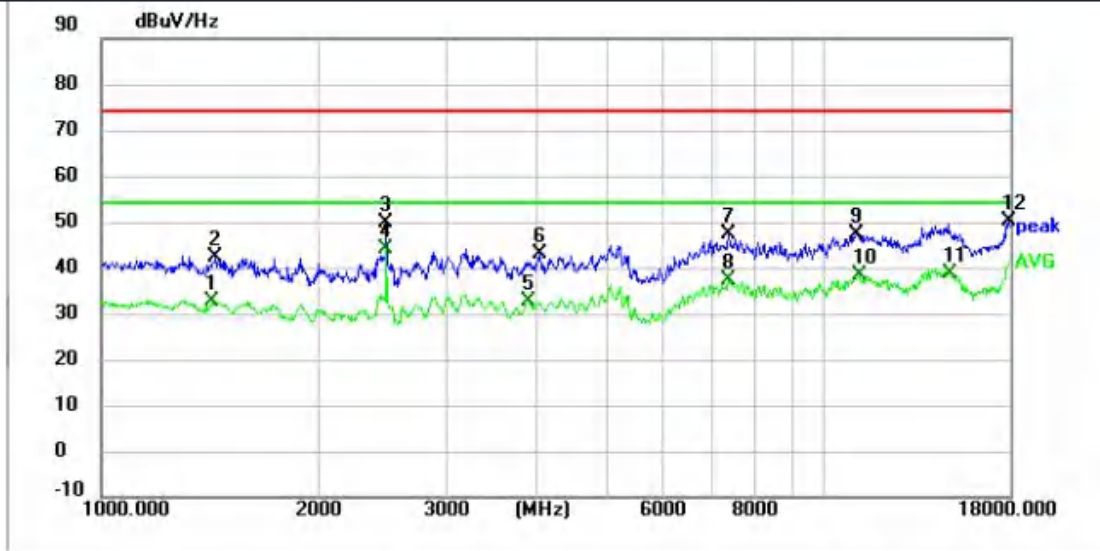
Freq. (MHz)	Reading (dBuv)	Ant. Factor (dB/m)	Cable Factor (dB)	Pre-amplifier (dB)	Correction Factor (dB/m)	Level (dBuv)	Limit (dBuV/m)	Margin (dB)	Remark	Polarity
2426.00	90.07	29.23	4.02	38.2	-4.95	85.12	114	28.88	Peak	Horizontal
2426.00	81.21	29.23	4.02	38.2	-4.95	76.26	94	17.74	Average	Horizontal
2426.00	82.13	29.23	4.02	38.2	-4.95	77.18	114	36.82	Peak	Vertical
2426.00	67.68	29.23	4.02	38.2	-4.95	62.73	94	31.27	Average	Vertical

Mode1 / Polarization: Horizontal / CH: H



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/Hz)	Limit (dBuV/Hz)	Margin (dB)	Detector
1	1312.5434	33.34	-1.62	31.72	54.00	-22.28	AVG
2	1323.9855	42.71	-1.63	41.08	74.00	-32.92	peak
3	2480.5621	49.04	2.64	51.68	74.00	-22.32	peak
4 *	2480.5621	44.15	2.64	46.79	54.00	-7.21	AVG
5	4910.1071	23.57	11.47	35.04	54.00	-18.96	AVG
6	4924.3340	32.39	11.59	43.98	74.00	-30.02	peak
7	7404.8810	19.26	22.14	41.40	54.00	-12.60	AVG
8	7688.7010	28.17	22.66	50.83	74.00	-23.17	peak
9	8361.6561	27.04	22.68	49.72	74.00	-24.28	peak
10	8682.1480	17.49	22.67	40.16	54.00	-13.84	AVG
11	17844.4396	50.51	-9.73	40.78	54.00	-13.22	AVG
12	17896.1431	59.55	-9.42	50.13	74.00	-23.87	peak

Mode1 / Polarization: Vertical / CH: H



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/Hz)	Limit (dBuV/Hz)	Margin (dB)	Detector
1	1426.7000	34.07	-1.48	32.59	54.00	-21.41	AVG
2	1442.0000	43.52	-1.37	42.15	74.00	-31.85	peak
3	2482.4000	47.11	2.66	49.77	74.00	-24.23	peak
4 *	2482.4000	41.44	2.66	44.10	54.00	-9.90	AVG
5	3907.0000	25.56	7.07	32.63	54.00	-21.37	AVG
6	4032.8000	35.84	7.30	43.14	74.00	-30.86	peak
7	7363.1000	25.18	22.13	47.31	74.00	-26.69	peak
8	7386.9000	15.28	22.12	37.40	54.00	-16.60	AVG
9	11070.8000	19.42	28.06	47.48	74.00	-26.52	peak
10	11150.7000	10.30	28.12	38.42	54.00	-15.58	AVG
11	14882.2000	49.45	-10.77	38.68	54.00	-15.32	AVG
12	17976.2000	59.13	-9.02	50.11	74.00	-23.89	peak

Test channel:2480MHz

Freq. (MHz)	Reading (dBuv)	Ant. Factor (dB/m)	Cable Factor (dB)	Pre-amplifier (dB)	Correc tion Factor (dB/m)	Level (dBuv)	Limit (dBu V/m)	Margin (dB)	Remark	Polarity
2480.00	91.41	29.2	4.02	38.3	-5.08	86.33	114	27.67	Peak	Horizontal
2480.00	81.53	29.2	4.02	38.3	-5.08	76.45	94	17.55	Average	Horizontal
2480.00	82.23	29.2	4.02	38.3	-5.08	77.15	114	36.85	Peak	Vertical
2480.00	68.45	29.2	4.02	38.3	-5.08	63.37	94	30.63	Average	Vertical

Note:

1) Level= Reading + Factor; Factor =Antenna Factor+ Cable Loss- Preamp Factor

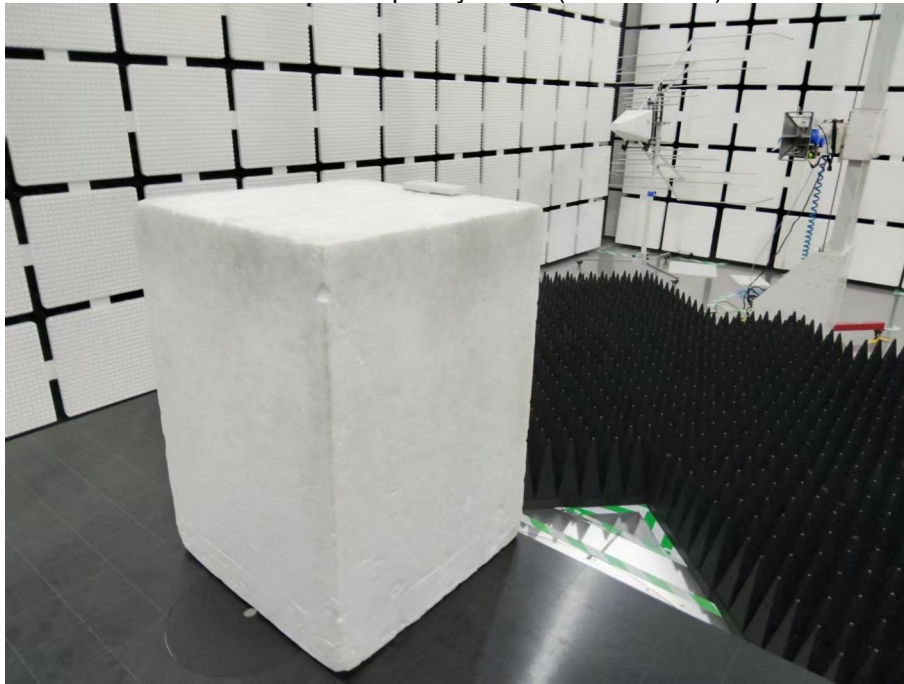
2) Margin = Limit – Level

3) Average measurement was not performed if peak level is lower than average limit (54dBuV/m) for above 1GHz.

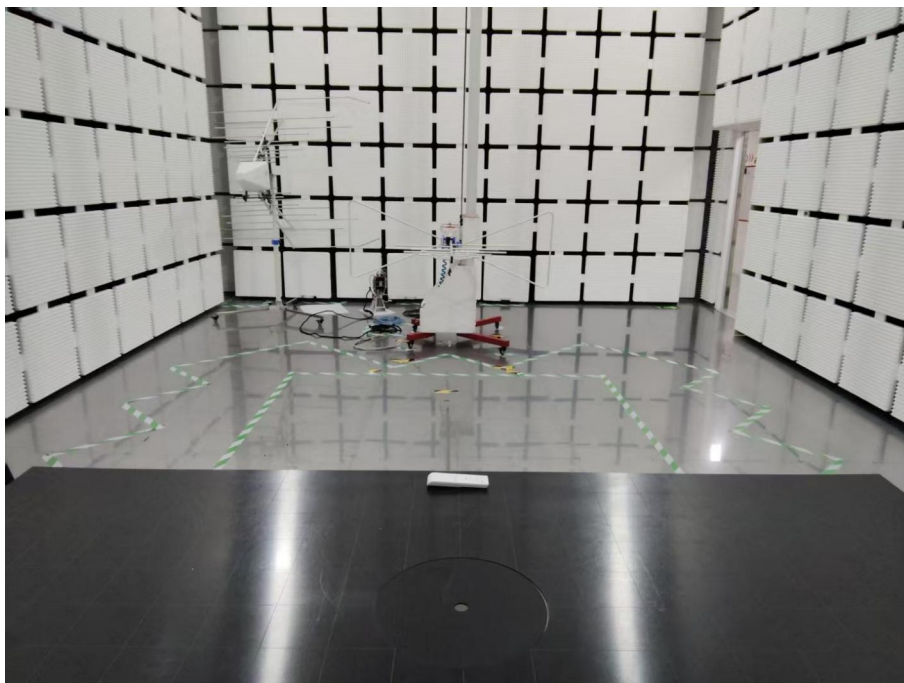


## 6. TEST SETUP PHOTOS

Band edge emissions (Radiated)  
Emissions in frequency bands (above 1GHz)

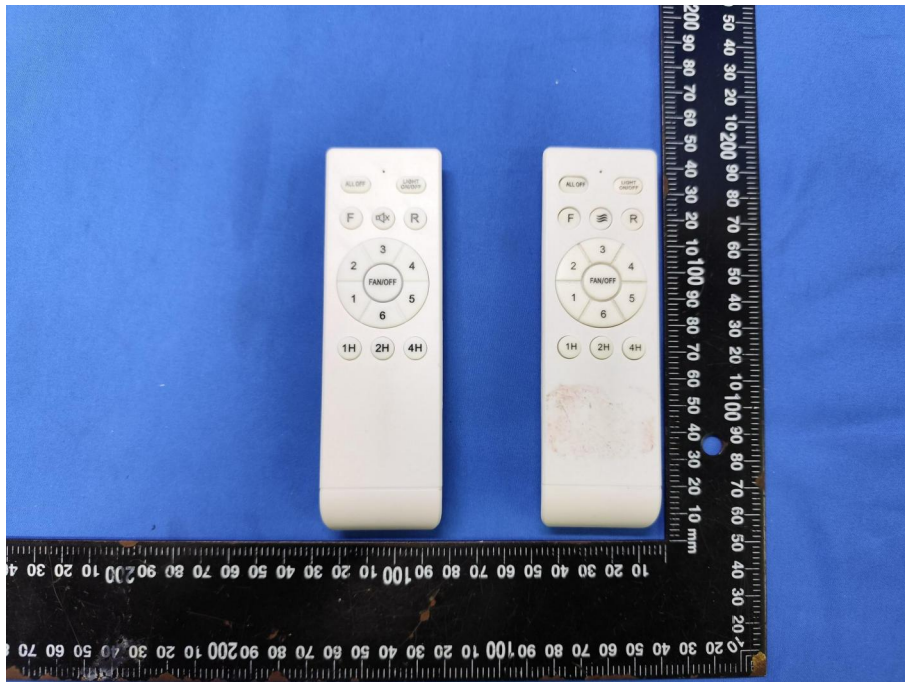


Emissions in frequency bands (below 1GHz)



## 7. EXTERNAL AND INTERNAL PHOTOS

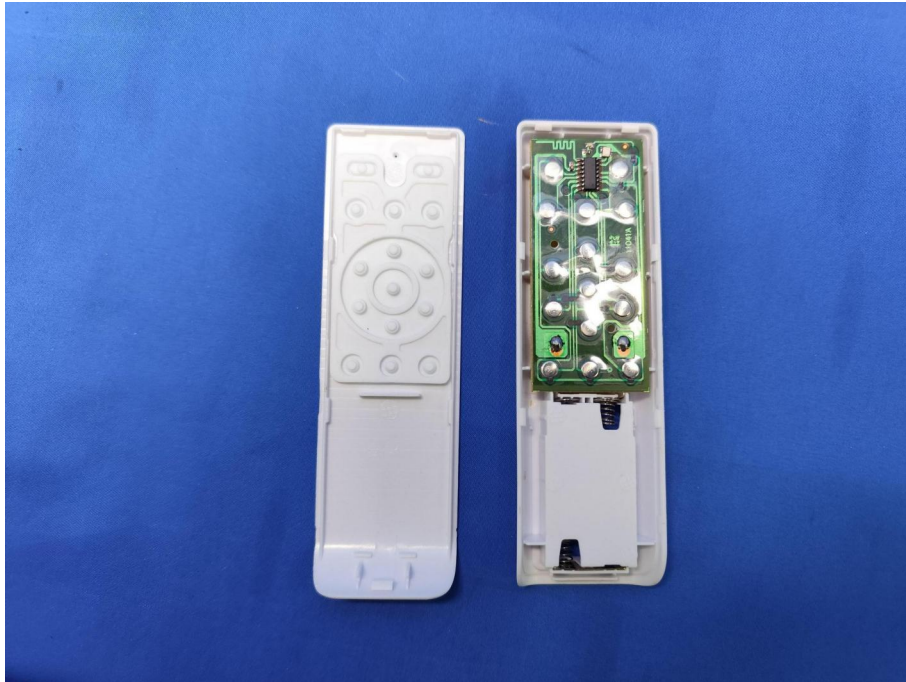
### 7.1 External photos



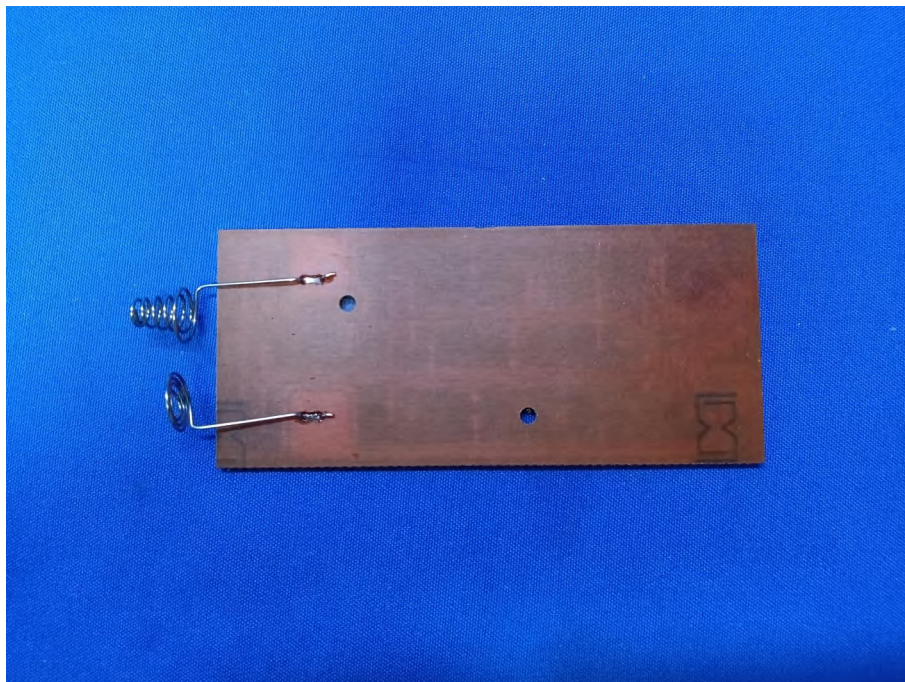
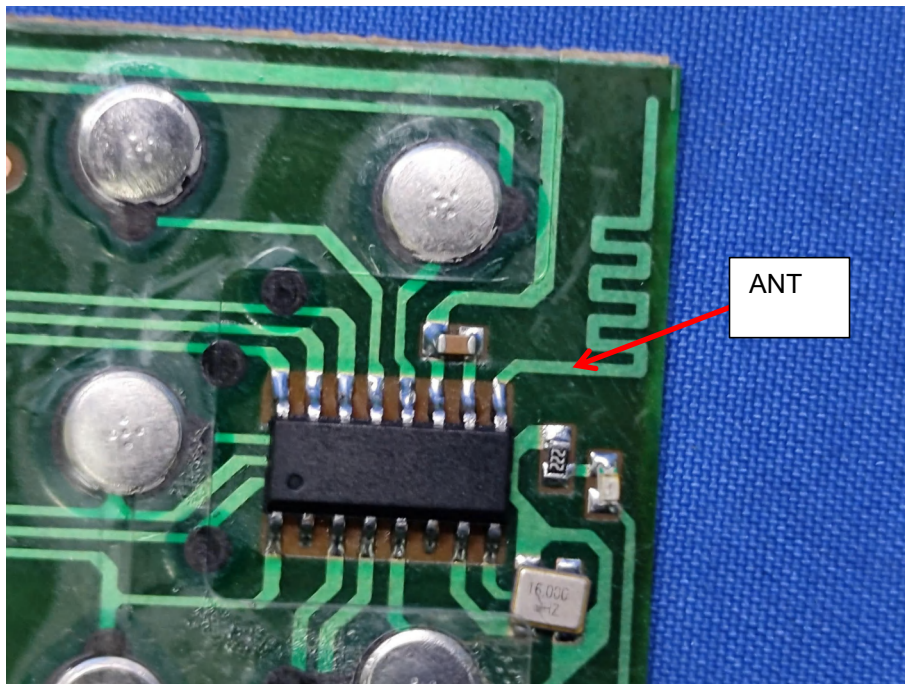




## 7.2 Internal photos







-----End of the report-----